

REMARKS

This responds to the Office Action dated November 15, 2005.

Claim 29 is amended. Claims 1-36 remain pending in this application.

Information Disclosure Statement

Applicant submitted a Supplemental Information Disclosure Statement and a 1449 Form on November 23, 2004. Applicant respectfully requests that initialed copies of the 1449 forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

§112 Rejection of the Claims

Claims 29 and 30 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 has been amended to include an appropriate antecedent basis. Applicant believes that the amendment has addressed the issue raised in the Office Action.

Applicant respectfully requests reconsideration and allowance of claims 29 and 30.

§103 Rejection of the Claims

Claims 1, 2, 15-20, 29, 31 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over “Contak TR CHFD” System Guide (hereinafter “System Guide”) in view of Stroebel et al. (U.S. Patent No. 5,725,561, hereinafter “Stroebel”).

Claims 3-6 were rejected under 35 U.S.C. § 103(a) as obvious over the System Guide in view of Stroebel.

Claims 28 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the System Guide in view of Stroebel.

Claim 1

Applicant respectfully traverses the rejection and submits that the System Guide and Stroebel, each alone or in combination, do not provide the recited subject matter. For example, Applicant is unable to find in the System Guide and Stroebel, each alone or in combination, among other things, a teaching or suggestion of a rate smoothing module configured to select a first rate smoothing percentage and a second rate smoothing percentage of a rate smoothing algorithm based on whether a predetermined state is present, as recited in claim 1.

Though Stroebel relates to the triggering/activating of rate smoothing using criteria related to atrial interval (column 9, lines 26-46), and the System Guide relates to “rate smoothing up” and “rate smoothing down” percentages (page 6-29), the proposed combination of references does not provide that the rate smoothing percentages are selected based on whether the predetermined state is present. Therefore, Applicant respectfully submits that the proposed combination of references does not provide a proper basis for the obviousness rejection.

Additionally, Applicant respectfully submits that Stroebel teaches away from the proposed combination of references. Stroebel relates to “a rate smoothing capability to prevent large, sudden drop in pacing rate”. (Column 8, lines 1-3; see also column 2, line 62 to column 3, line 11). Stroebel teaches:

In general it is considered symptomatic for a patient to experience sudden rate drops so we smooth them. The contrary, sudden rate increase, does not appear to require smoothing.

(Column 8, lines 10-13). Then, the cited portions of Stroebel (column 9) teach prevention of “abrupt downward adjustment in rate”, and “a pacing rate ‘floor’” below which the rate will be smoothed. Thus, Stroebel teaches away from providing the first rate smoothing percentage limiting a degree of pacing rate increase, as recited in claim 1.

Applicant respectfully requests reconsideration and allowance of claim 1.

Claims 2 and 15

Applicant respectfully traverses the rejection of claims 2 and 15. Claims 2 and 15 are dependent on claim 1. Thus, the discussion above for claim 1 is incorporated herein to support the patentability of claims 2 and 15.

Applicant respectfully requests reconsideration and allowance of claims 2 and 15.

Claim 16

Applicant respectfully traverses the rejection and submits that the System Guide and Stroebel, each alone or in combination, do not teach or suggest the recited subject matter. For example, Applicant is unable to find in the System Guide and Stroebel, each alone or in combination, among other things, a teaching or suggestion of selecting a first rate smoothing percentage and a second rate smoothing percentage of a rate smoothing algorithm using an implantable system if the state of at least one of a cardiac signal and a physiologic parameter corresponds to a predetermined state, as recited in claim 16.

Though Stroebel relates to the triggering/activating of rate smoothing using criteria related to atrial interval (column 9, lines 26-46), and the System Guide relates to “rate smoothing up” and “rate smoothing down” percentages (page 6-29), the proposed combination of references does not provide that the rate smoothing percentages are selected based on whether the predetermined state is present. Therefore, Applicant respectfully submits that the proposed combination of references does not provide a proper basis for the obviousness rejection.

Additionally, Applicant respectfully submits that Stroebel teaches away from the proposed combination of references. Stroebel relates to “a rate smoothing capability to prevent large, sudden drop in pacing rate”. (Column 8, lines 1-3; see also column 2, line 62 to column 3, line 11). Stroebel teaches:

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(Column 8, lines 10-13). Then, the cited portions of Stroebel (column 9) teach prevention of “abrupt downward adjustment in rate”, and “a pacing rate ‘floor’” below which the rate will be smoothed. Thus, Stroebel teaches away from providing the first rate smoothing percentage limiting a speed of pacing rate increase, as recited in claim 16.

Applicant respectfully requests reconsideration and allowance of claim 16.

Claims 17-20, 29, and 31

Applicant respectfully traverses the rejection of claims 17-20, 29, and 31. Claims 17-20, 29, and 31 are dependent on claim 16. Thus, the discussion above for claim 16 is incorporated herein to support the patentability of claims 17-20, 29, and 31.

Applicant respectfully requests reconsideration and allowance of claims 17-20, 29, and 31.

Claim 32

Applicant respectfully traverses the rejection and submits that Boule and Stroebel, each alone or in combination, do not teach or suggest the recited subject matter. For example, Applicant is unable to find in System Guide and Stroebel, each alone or in combination, among other things, a teaching or suggestion of selecting a first rate smoothing percentage and a second rate smoothing percentage of a rate smoothing algorithm using an implantable system if the state of a cardiac signal corresponds to at least one predetermined heart rate state, as recited in claim 32.

Though Stroebel relates to the triggering/activating of rate smoothing using criteria related to atrial interval (column 9, lines 26-46), and the System Guide relates to “rate smoothing up” and “rate smoothing down” percentages (page 6-29), the proposed combination of references does not provide that the rate smoothing percentages are selected based on whether the predetermined state is present. Therefore, Applicant respectfully submits that the proposed combination of references does not provide a proper basis for the obviousness rejection.

Additionally, Applicant respectfully submits that Stroebel teaches away from the proposed combination of references. Stroebel relates to “a rate smoothing capability to prevent large, sudden drop in pacing rate”. (Column 8, lines 1-3; see also column 2, line 62 to column 3, line 11). Stroebel teaches:

In general it is considered symptomatic for a patient to experience sudden rate drops so we smooth them. The contrary, sudden rate increase, does not appear to require smoothing.

(Column 8, lines 10-13). Then, the cited portions of Stroebel (column 9) teach prevention of “abrupt downward adjustment in rate”, and “a pacing rate ‘floor’” below which the rate will be smoothed. Thus, Stroebel teaches away from providing the first rate smoothing percentage limiting a speed of pacing rate increase, as recited in claim 32.

Applicant respectfully requests reconsideration and allowance of claim 32.

Claim 3-6

Applicant respectfully traverses the rejection of claims 3-6. Claims 3-6 are dependent on claim 1. Thus, the discussion above for claim 1 is incorporated herein to support the patentability of claims 3-6.

Applicant respectfully requests reconsideration and allowance of claims 3-6.

Claims 28 and 30

Applicant respectfully traverses the rejection of claims 28 and 30. Claims 28 and 30 are dependent on claim 16. Thus, the discussion above for claim 16 is incorporated herein to support the patentability of claims 28 and 30.

Applicant respectfully requests reconsideration and allowance of claims 28 and 30.

Reentry of Withdrawn Claims Requested

Claims 7-14, 21-27, and 33-36 were withdrawn from consideration. In light of what is believed to be allowable as discussed above, Applicant respectfully requests reentry and consideration of claims 7-14, 21-27, and 33-36 in this application.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6965 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

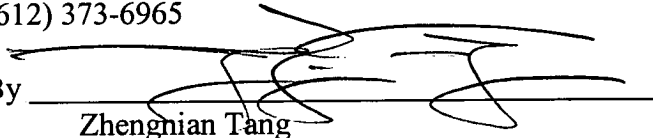
Respectfully submitted,

ERIC G. LOVETT ET AL.

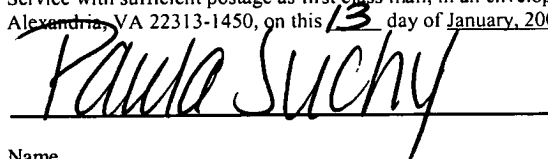
By their Representatives,

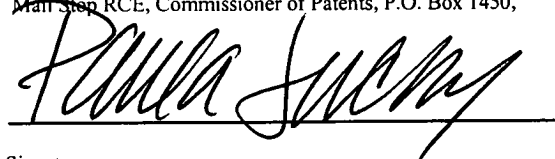
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Date 1/13/2006

By 
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop RCE, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 13 day of January, 2006.


Name


Signature